



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,728	10/11/2001	Jean Luc Archambault	330	8406

7590 04/04/2003
CIENA Corporation
Legal Department
1201 Winterson Road
Linthicum, MD 21090

EXAMINER

KIM, ELLEN E

ART UNIT PAPER NUMBER

2874

DATE MAILED: 04/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/975,728		ARCHAMBAULT ET AL.	
	Examiner		Art Unit	
	Ellen E Kim		2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-15 and 19-21 is/are rejected.
- 7) ☒ Claim(s) 6, 7 and 16-18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Note that Applicant's fig. 1 shows that the external modulator is coupled to the filter not the second transmitter as claimed in claim 12.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, 8-11, and 19 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Alexander [USPAT 5,696,615].

Alexander discloses wavelength division multiplexed optical communication system as shown in Fig. 2 including optical filtering system as shown in Fig. 3.

In re claim 4, Alexander clearly teaches at column 5, lines 5-23 that the combiner 30 is selected from any passive optical component and frequently optical slitters are used.

In re claims 10 and 11, the Erbium doped optical fiber amplifier is disclosed in column 5, lines 24-38.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander in view of Udd [USPAT 5,627,927].

Alexander discloses every aspect of claimed invention except for the Fabry-Perot etalon. Udd shows the general teaching about Fabry-Perot etalon filter at column 1, lines 35-47 that the Fabry-Perot etalon based filters brings the most fully transmitted light and the most strongly reflected light. Therefore It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Alexander's device to include the Fabry-Perot etalon based filter for the purpose of the fully transmitted light signal and the most strongly reflected light signal.

Art Unit: 2874

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander as applied to claim 1 above, and further in view of Poustie et al [USPAT 5,796,891].

Alexander discloses every aspect of claimed invention except for the plurality of peaks being periodically spaced within the transmission spectrum.

Poustie et al show an optical filter having the periodically spaced plurality of peaks within the transmission spectrum [column 2, line 58- column 3, line 15].

Therefore, It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Alexander's device to include the periodically spaced plurality of peaks within the transmission spectrum for the purpose of the simplicity of the optical system.

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander as applied to claim 1 above.

Alexander discloses every aspect of claimed invention except for the external modulator. It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Alexander's device to include the external modulator to the transmitter or the filter for the purpose of having the desired output of the transmitter or the filter.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander as applied to claim 1 above, and further in view of Alexander et al [USPAT 5,784,184].

Alexander discloses every aspect of claimed invention except for the FECE and FECD.

Alexander et al disclose WDM optical communication systems including the FECE and FECD.

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Alexander's device to include the FECE and FECD for the purpose of decreasing bit error rate.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander as applied to claim 1 above, and further in view of Pfeiffer [USPAT 5,784,506].

Alexander discloses every aspect of claimed invention except for the CDMA.

Pfeiffer discloses frequency-encoded optical CDMA transmission system for the purpose of simpler and economical optical system.

Therefore, It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Alexander's device to include the CDMA for the purpose of simpler and economical optical system.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander as applied to claim 1 above, and further in view of Coutinho [USPAT 5,777,769].

Alexander discloses every aspect of claimed invention except for the low pass filter.

Coutinho teaches that the low pass filter is used for passing the low frequency power components while blocking high frequency noise.

Therefore, It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Alexander's device to include the low pass filter for the purpose of passing the low frequency power components while blocking high frequency noise.

Art Unit: 2874

Allowable Subject Matter


Claims 6, 7, and 16-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art does not disclose or suggest an optical device comprising all the specific elements with the specific combination including a second filtering element as set forth in claims 6, 7, 16 -18.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Further references of interest are cited on Form PLO-892, which is attachment to this office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen Kim whose telephone number is (703) 308-4946. The examiner can normally be reached on Monday and Thursday.

Ellen E. Kim 
Primary Examiner

April 2, 2003/EK